Decision Logic™

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Abstract

Decision Logic™ expresses graphically the way we reason to reach our decisions as an ‘information flow protocol’, and thus helps find out any reasoning flaws or unnecessary shortcuts — quite important when responsibility is high, such as in competitive environments or in the public domain.

1 Professional value

Decision is often hailed as ‘what ultimately matters’ — and it often is. To avoid decision-making as brute as that of the Gordian knot, an ‘informed’ kind of decision is sought after in most professional contexts, with much investment in obtaining rich data and processing it with advanced statistics. However, all of this could be in vain if the reasoning protocol contains deficiencies such as premature conclusions, the wrong comparisons, or non sequiturs.

Decision Maps™ deal with the process of reasoning involved in decision-making, representing its variants as information-flow protocols. Graphical expressions of reasoning patterns help discover styles of decision-making, as well as match them to the needs or expectations of particular applications — e.g. personal, enterprise, or the public domain.

2 Workflow

Figure 1 The work to be carried out over four (4) hours; a number of ‘loop’ iterations may be necessary to achieve a satisfactory model (CPD, DCD)
3 Programme

INTRODUCTION (1H)

- Focus: situation, procedure, reasoning (Figure 4)
- Exploring the reasoning; initial model (CPD, DCD)
- Verification; consensus; improving accuracy

WORK SESSION (4H)

- Work in groups (2–4 people)
- Interactive assistance

PRESENTATION, DISCUSSION, AND CONCLUSION (1H)

- Shared experiences
- Applicability issues

4 Technical notes

METHODS\textsuperscript{a}

- Decision Model Analysis — DMA\textsubscript[M]

TECHNIQUES\textsuperscript{b}

- Text mark-up — TMU\textsubscript[T]
- Concise process diagrams — CPD\textsubscript[T]
- Descriptive causal diagrams — DCD\textsubscript[T]

AUDIENCE

- Administrators (e.g. policy-makers, strategists)
- Legal professionals (e.g. lawyers, judges, police officers)
- Medical doctors (e.g. general practitioners, specialists)
- Military officers (e.g. strategy, operations)

COMPETENCES\textsuperscript{c}

- Identify and get to know elements of interest (e.g. ‘indicators’)
- Identify and get to know causal relationships between elements
- Distinguish between causal and computational relationships (e.g. in ‘indices’)
- Think clearly and explain how some elements may affect others
- Register and communicate this efficiently
- Identify information in existing documents regarding causal explanations
- Identify where action takes place in the system
- Think of the limits or boundaries of the system (e.g. ‘closed’ or ‘open’ type)
- Start thinking of ‘special’ elements (e.g. as points of concern or intervention)
- Think how to structure a problem (e.g. ‘XYZ’ format)
- Identify the tasks and stages of a process (e.g. along a timeline)

\textsuperscript{a} v. Perdicoulis, 2014b
\textsuperscript{b} v. Perdicoulis, 2014a
\textsuperscript{c} Required to some extent; to be reinforced in the workshop
5 Protocols

Figure 2 Generic Concise Process Diagram (CPD)

Figure 3 Generic Descriptive Causal Diagram (DCD); feedback and assessment in gold

Figure 4 Decision Model Analysis (DMA) — systems learning model (Perdicoulis, 2015)
6 Materials and preparation

**Case-study/ Work material** Participants should bring their own material (e.g. stories, accounts, experience) in (human) memory or documentation (e.g. digital or printed media).

**Software** Systems Planning\textsuperscript{sm} diagramming can be carried out manually, with pencil and paper. Optionally, participants are welcome to use their own diagramming software, such as Graphviz\textsuperscript{1}, LibreOffice Draw, OmniGraffle\textsuperscript{2}, or Visio.

References and further reading


\textsuperscript{1} v. starter file (Perdicoulis, 2011b)

\textsuperscript{2} v. stencils (Perdicoulis, 2011c,d)